

Curtis A. Norton
Essex Group Inc., Metals Reclamation Center
232 West Pearl Street
Jonesboro, Indiana 46938

Re: Revised Registered Construction and Operation
Status,
053-11841-00037

Dear Mr. Norton:

Essex Group Inc., Metals Reclamation Center was issued a registration on August 10, 1999, for a copper wire reclamation center. A letter notifying the Office of Air Management of an addition of one (1) 60" screener (ID EU21) was received on February 2, 2000, and has been reviewed.

Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following one (1) 60" screener (ID EU21), which will exhaust through the existing baghouse (ID AAF Baghouse) and stack ID #S1, to be located at 232 West Pearl Street, Jonesboro, Indiana 46938, is classified as registered:

- (a) Three (3) 43" granulators, identified as EU1, EU2 and EU10, respectively, each constructed in 1980, each granulating 10,000 pounds of copper wire per hour, each controlled by baghouse (ID AAF Baghouse) for particulate control, each exhausting through stack ID # S1;
- (b) Four (4) 20" granulators, identified as EU3, EU 11, EU12, and EU13, respectively, each constructed in 1980, each granulating 5,000 pounds of copper wire per hour, each controlled by baghouse (ID AAF Baghouse) for particulate control, each exhausting through stack ID # S1;
- (c) Two (2) 60" screeners, identified as EU4 and EU9, respectively, each constructed in 1980, each sieving 10,000 pounds of wire pieces per hour, each controlled by baghouse (ID AAF Baghouse) for particulate control, each exhausting through stack ID # S1;
- (d) Five (5) separation tables, identified as EU5, EU6, EU7, EU15, and EU16, respectively, each constructed in 1980, each separating 5,000 pounds of wire pieces per hour, each controlled by baghouse (ID AAF Baghouse) for particulate control, each exhausting through stack ID # S1;
- (e) Two (2) 60" screeners, identified as EU14 and EU17, respectively, each constructed in 1980, each sieving 10,000 pounds of wire pieces per hour, each controlled by baghouse (ID Kice Baghouse) for particulate control, each exhausting through stack ID # S2;
- (f) Three (3) aspirators, identified as EU8, EU18, and EU19, respectively, each constructed in 1999, each aspirating 2,000 pounds of wire pieces per hour, each controlled by baghouse (ID Kice Baghouse) for particulate control, each exhausting through stack ID # S2;

- (g) One (1) electrostatic separator, identified as EU20, constructed in 1992, separating 1,000 pounds of wire pieces per hour, controlled by baghouse (ID Kice Baghouse) for particulate control, each exhausting through stack ID # S2; and
- (h) One (1) 60" screener, identified as EU21, sieving 10,000 pounds of wire pieces per hour, controlled by baghouse (ID AAF Baghouse) for particulate control, and exhausting through stack ID # S1.

The following conditions shall be applicable:

1. Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:
 - (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.
2. Pursuant to 326 IAC 6-3 (Process Operations), the particulate matter (PM) from the granulators, screeners, separation tables, aspirators, and the electrostatic separator shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The baghouses (AAF Baghouse and the Kice Baghouse) shall be in operation at all times the granulators, screeners, separation tables, aspirators, and the electrostatic separator are in operation, in order to comply with this limit.

3. Parametric Monitoring
The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the granulators, screeners, separation tables, aspirators, and the electrostatic separator, at least once weekly when the granulators, screeners, separation tables, aspirators, and the electrostatic separator are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 2.0 and 5.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.

4. Baghouse Inspections
An inspection shall be performed each calendar quarter of all bags controlling the granulators, screeners, separation tables, aspirators, and the electrostatic separator when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

5. Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been replaced.
- (b) Based upon the findings of the inspection, any additional corrective actions will be devised within eight (8) hours of discovery and will include a timetable for completion.

This registration is a revised registration issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Management that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

**Compliance Data Section
Office of Air Management
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015**

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Management (OAM) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments
PR/EVP

cc: File - Grant County
Air Compliance Section Inspector - Jim Thorpe
Compliance Data Section - Karen Nowak
Permit Tracking - Janet Mobley
Air Programs Section - Michele Boner

Registration Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3)

Company Name:	Essex Group Inc., Metals Reclamation Center
Address:	232 West Pearl Street Jonesboro, Indiana 46938
City:	Jonesboro, Indiana
Authorized individual:	William D. Nicholson
Phone #:	219-461-4952
Registration #:	053-11841-00037

I hereby certify that Essex Group Inc., Metals Reclamation Center is still in operation and is in compliance with the requirements of Registration **053-11841-00037**.

Name (typed):
Title:
Signature:
Date:

**Indiana Department of Environmental Management
Office of Air Management**

Technical Support Document (TSD) for a Registered Construction and
Operation Status

Source Background and Description

Source Name:	Essex Group, Inc., Metals Reclamation Center
Source Location:	232 West Pearl Street, Jonesboro, Indiana 46938
County:	Grant
SIC Code:	3399
Registration No.:	053-11841-00037
SIC Code:	3399
Permit Reviewer:	Phillip Ritz/EVP

The Office of Air Management (OAM) has reviewed an application from Essex Group, Inc., Metals Reclamation Center relating to the construction and operation of a modification to a copper wire reclamation center.

New Emission Units and Pollution Control Equipment

The source consists of the following new emission units and pollution control devices at registration level:

- (a) One (1) 60" screener, identified as EU21, sieving 10,000 pounds of wire pieces per hour, controlled by baghouse (ID AAF Baghouse) for particulate control, and exhausting through stack ID # S1;

Registered Emission Units and Pollution Control Equipment

The existing source consists of the following registered emission units and pollution control devices:

- (a) Three (3) 43" granulators, identified as EU1, EU2 and EU10, respectively, each constructed in 1980, each granulating 10,000 pounds of copper wire per hour, each controlled by baghouse (ID AAF Baghouse) for particulate control, each exhausting through stack ID # S1;
- (b) Four (4) 20" granulators, identified as EU3, EU 11, EU12, and EU13, respectively, each constructed in 1980, each granulating 5,000 pounds of copper wire per hour, each controlled by baghouse (ID AAF Baghouse) for particulate control, each exhausting through stack ID # S1;

- (c) Two (2) 60" screeners, identified as EU4 and EU9, respectively, each constructed in 1980, each sieving 10,000 pounds of wire pieces per hour, each controlled by baghouse (ID AAF Baghouse) for particulate control, each exhausting through stack ID # S1;
- (d) Five (5) separation tables, identified as EU5, EU6, EU7, EU15, and EU16, respectively, each constructed in 1980, each separating 5,000 pounds of wire pieces per hour, each controlled by baghouse (ID AAF Baghouse) for particulate control, each exhausting through stack ID # S1;
- (e) Two (2) 60" screeners, identified as EU14 and EU17, respectively, each constructed in 1980, each sieving 10,000 pounds of wire pieces per hour, each controlled by baghouse (ID Kice Baghouse) for particulate control, each exhausting through stack ID # S2;
- (f) Three (3) aspirators, identified as EU8, EU18, and EU19, respectively, each constructed in 1999, each aspirating 2,000 pounds of wire pieces per hour, each controlled by baghouse (ID Kice Baghouse) for particulate control, each exhausting through stack ID # S2; and
- (g) One (1) electrostatic separator, identified as EU20, constructed in 1992, separating 1,000 pounds of wire pieces per hour, controlled by baghouse (ID Kice Baghouse) for particulate control, each exhausting through stack ID # S2.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) OP 27-02-92-0208, issued on January 25, 1989, and
- (b) Registration 053-11011-00037, issued on August 10, 1999.

All conditions from previous approvals were incorporated into this permit, and the original Registration 053-11011-00037, issued on August 10, 1999 has been superseded.

Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on February 2, 2000.

Emission Calculations

The calculations submitted by the applicant have been verified and found to be accurate and correct. These calculations are provided in Appendix A of this document (Appendix A, page 1 of 1)

Potential To Emit of the Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	0.95
PM-10	0.95
SO ₂	0.00
VOC	0.00
CO	0.00
NO _x	0.00

HAP's	Potential To Emit (tons/year)
HAP (Lead)	0.49
HAP (Antimony)	0.12
Total HAPs	0.61

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of lead are equal to or greater than two-tenths (0.2) tons per year and less than five (5) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-5.5-1(b)(1)(F).

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1995 OAM emission data.

Pollutant	Actual Emissions (tons/year)
PM	2.13
PM-10	0.00
SO ₂	0.00
VOC	0.00
CO	0.00
NO _x	0.00
HAP	0.00

County Attainment Status

The source is located in Grant County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Grant County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Grant County has been classified as attainment or unclassifiable for all criteria pollutant. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Registration Determination

326 IAC 2-5.5 (Registrations)

This existing source with the addition of the one (1) 60" screener, identified as EU21 is still at registration level.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to the one (1) 60" screener, identified as EU21.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to the one (1) 60" screener, identified as EU21.

State Rule Applicability - Entire Source

326 IAC 1-6-3 (Preventive Maintenance Plan)

The source has submitted a Preventive Maintenance Plan (PMP) on May 28, 1999. This PMP has been verified to fulfill the requirements of 326 IAC 1-6-3 (Preventive Maintenance Plan).

326 IAC 2-6 (Emission Reporting)

The source is located in Grant County and is not one of the twenty-eight (28) listed sources and its potential to emit PM₁₀ is less than one-hundred (100) tons per year including fugitive emissions, therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from the screener shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

UNIT	Process Weight Rate (tons per hour)	Allowable Emissions (pounds per hour)	Controlled Emissions (pounds per hour)
60" Screener (EU21)	5.00	12.05	0.0011

The baghouse (AAF Baghouse) shall be in operation at all times the screener is in operation, in order to comply with this limit.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

- (a) This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.
- (b) See attached calculations for detailed air toxic calculations. (Specify page numbers in Appendix A, ie. pages 13 through 15)

Conclusion

The operation of this modification to a copper wire reclamation center shall be subject to the conditions of the attached proposed **Registered Construction and Operation Status No. 053-11841-00037**.

Appendix A: Emission Calculations
PM-10, Lead and Antimony Emissions

Company Name: Essex Group Inc., Metals Reclamation Center
Address City IN Zip: 232 West Pearl Street, Jonesboro, Indiana 46938
CP: 053-11841
Pit ID: 053-00037
Reviewer: Phillip Ritz/EVP
Date: 2-2-2000

Process	Control Efficiency (from Baghouses)	Uncontrolled Potential PM-10 Emissions (tons/year)	Controlled Potential PM-10 Emissions (tons/year)	Uncontrolled Potential Lead Emissions (tons/year)	Controlled Potential Lead Emissions (tons/year)	Uncontrolled Potential Antimony Emissions (tons/year)	Controlled Potential Antimony Emissions (tons/year)
60" Screener (EU21)	99.50%	0.9545	0.0048	0.4857	0.0024	0.1215	0.0006
TOTAL EMISSIONS		0.9545	0.0048	0.4857	0.0024	0.1215	0.0006

Methodology:

Potential PM-10, Lead and Antimony Emissions are submitted by the source and shall be stack tested.

**Appendix A: Emission Calculations
Process Operations**

Company Name: Essex Group Inc., Metals Reclamation Center
Address City IN Zip: 232 West Pearl Street, Jonesboro, Indiana 46938
CP: 053-11841
Pit ID: 053-00037
Reviewer: Phillip Ritz/EVP
Date: 2-2-2000

Compliance with 326 IAC 6-3-2 (Process Operation)

The following calculation computes the allowable PM emission limit for the granulators, screeners, separation tables, aspirators, and electrostatic separator.

$$E = 4.10 * P^{0.67}$$

E = rate of emission in pounds per hour

P = process weight rate in tons per hour

Unit ID	Process Weight (lb/hr)	Process Weight (ton/hr)	Allowable Emissions (lb/hr)	Controlled Emissions (ton/yr)	Controlled Emissions (lb/hr)
60" Screener (EU21)	10,000	5.00	12.05	0.0048	0.0011
TOTAL EMISSIONS			12.05	0.00	0.00